

# Pollution Prevention & Good Housekeeping for Municipal Operations



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**Department of**  
**Environmental Services**

# Municipal Pollution Prevention Program Requirements:

- **Develop a program to reduce and prevent discharge of pollutants from municipal operations and facilities**
- **Implement Best Management Practices (BMPs)**
- **Develop measurable goals**
- **Training of Municipal Staff**
- **Annual Report to DEC**



# Categories of Municipal Operations

## Street & Bridge Maintenance



# Categories of Municipal Operations

## Winter Road Maintenance



# Categories of Municipal Operations

## Stormwater System Maintenance



# Categories of Municipal Operations

## Vehicle & Fleet Maintenance



# Categories of Municipal Operations

## Parks & Open Space Maintenance



# Categories of Municipal Operations

## Municipal Building Maintenance





# Categories of Municipal Operations

## Solid Waste Management



# Categories of Municipal Operations

## Streambank & Hydrologic Habitat Maintenance



# Categories of Municipal Operations

## New Construction and Land Disturbances



# Categories of Municipal Operations

## Right-of-Way Maintenance



# *Transitory Discharges*



# Salt Storage





10

FTR  
109







# **Monroe County Municipal Operations**

- **21 Parks, 1 Marina**
- **650 County Highway Miles**
- **178 County Bridges**
- **22 County Operated Buildings**
- **Fueling Operations**
- **Community College**
- **Fleet Maintenance**
- **Solid Waste Transfer Station**
- **Landfills**
- **2 x WWTP's**



# Monroe County Parks Department

## Stormwater Management Plan

### Parks to be addressed by the SWMP

Black Creek	Churchville	Durand Eastman	Ellison
Genesee Valley	Greece Canal	Highland	I-Bay Marine
Lehigh Valley	Mendon	Northampton	Oatka
Ontario	Powdermill	Seneca	Seneca Park Zoo
Tryon	Webster	Wetlands	

### Potential sources of pollution generated by operations and facilities.

Fertilizer/Pesticide Application	Hazardous Waste Material Storage
Golf Courses	Fuel Storage/Dispensing
Septic Pumpouts	Septic Systems
Pet Waste	Building Washing
Sidewalk Cleaning	Sidewalk Salting
Road Salting	Restaurants
Outdoor Vehicle Washing	Road Salting
Salt Storage	Salt Vehicle Washing

### Management practices already implemented that address stormwater quality

Integrated Pest Management	Litter Control
Recycling	Spill Planning
Alternative Products Usage	Sidewalk, Street, Parking Lot Sweeping
Inspection of on-site systems	Erosion Control Practices
Inspections of drainage system	Maint., repair system components
Recycle used automotive fluids	Sensitive, priority waterbody considerations

# Typical Municipal Municipal Operations

- Highway Dept
- Parks
- Fueling Operations
- Sewer Dept
- Fleet Maintenance
- Solid Waste Collection
- Fire / Police
- Municipal Building

# **Monroe County Stormwater Coalition**

## **Guidance to Developing an Effective Pollution Prevention and Good Housekeeping Program**



*Revised March 2010*

## *Developing a Plan*

# **Step 1: Understand What's Required**

- **Develop a Program**
- **Conduct an Assessment**
- **Establish Measurable Goals**
- **Select and Implement BMP's**
- **Report on Progress**

## *Developing a Plan*

# **Step 2: Develop an Inventory**

### **Fixed Facilities:**

**DPW Garage, Municipal Buildings, Community Center, Fire Dept. etc**

### **Operations:**

**Street Repair/Maint., Landscape Maint.,  
Drainage System Operation, Animal Control**



# Fixed Facilities



# Fixed Facilities



# Operations



# Operations



# Operations



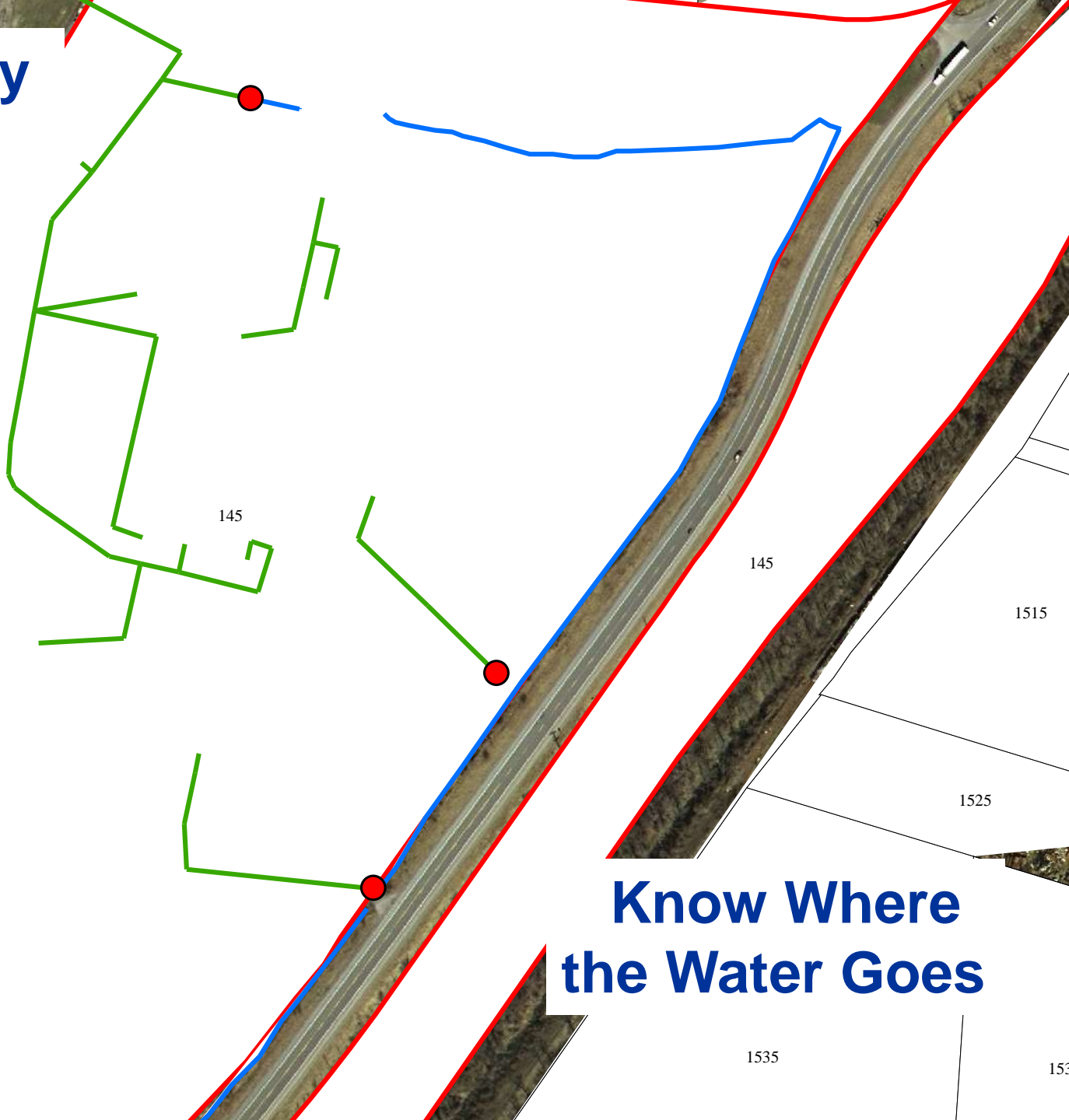
# Operations



## **Step 3: Conduct an Assessment**

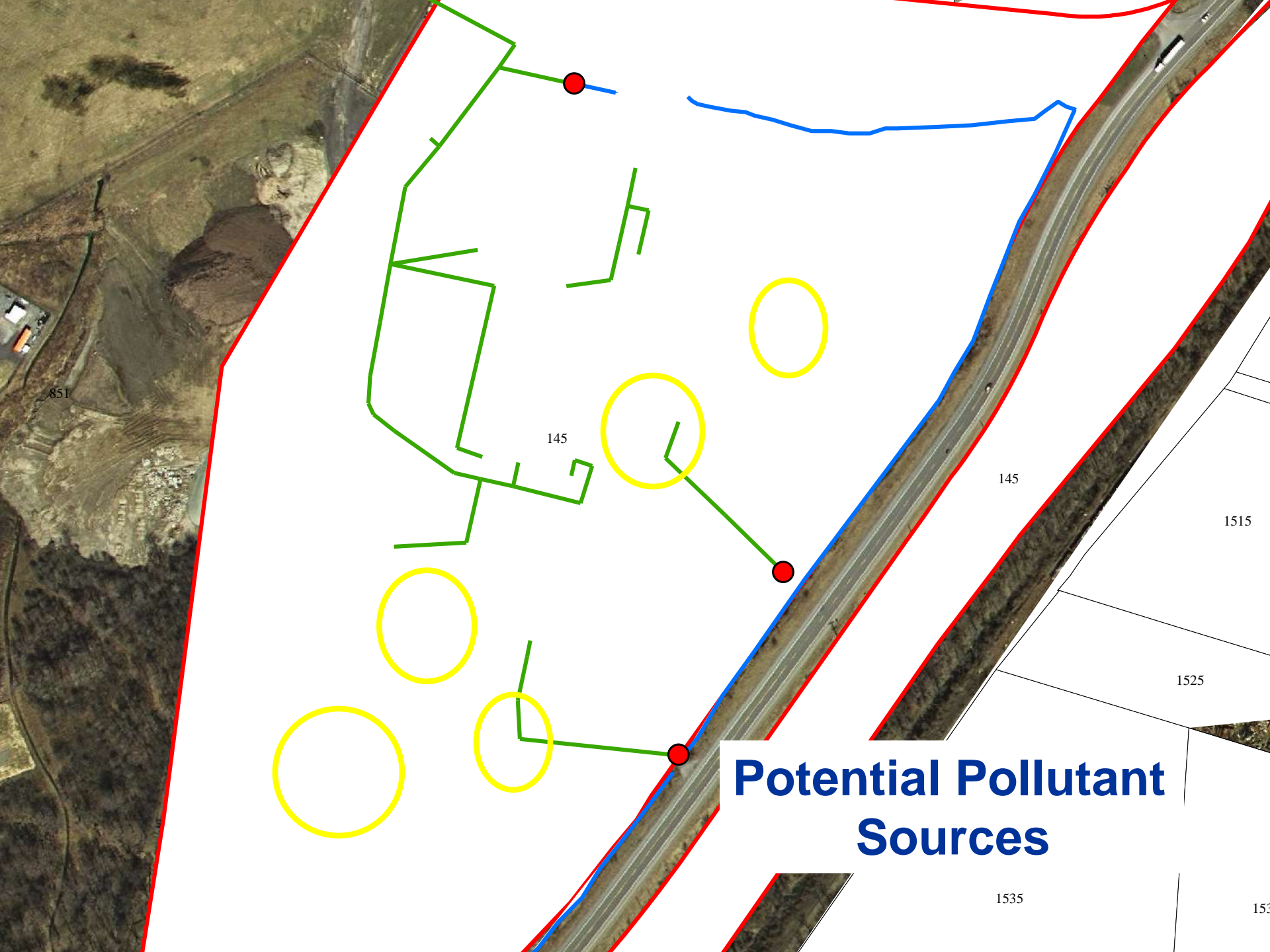
- **Identify Facilities/Operations to be covered under the plan**
- **Identify Existing BMP's**
- **Determine Pollution Sources**

# Monroe County Fleet Center



**Know Where  
the Water Goes**





851

145

145

1515

1525

1535

# Potential Pollutant Sources

# Current BMPs



# Current BMPs



# Pollutant Sources



**Vehicle Washing**

# Vehicle Washing





# Vehicle Washing



# Vehicle Washing





# Vehicle Washing



# Pollutant Sources



**Bulk Storage  
of Materials**



# Material Storage





# Material Storage



# Pollutant Sources



# Village of XYZ Stormwater Management Plan

## Facilities to be Addressed

Municipal Garage  
Towpath Park  
Bridge Tenders Park  
Memorial Gazebo

Park Shelter on Erie Canal  
Town Office Building  
Spencerport Depot and Canal Museum  
Spencerport Municipal Electric

## Potential Sources of Pollution generated by Operations and Facilities

Street maintenance  
Road & Parking lot striping and painting  
Culvert maintenance  
Parking lot maintenance  
Road Salting  
Salt Storage  
Salt vehicle washing after winter  
Vehicle and equipment washing  
Vehicle and equipment repair work  
Stream Bank/Bed alterations

Hazardous Material Storage  
Outdoor Fueling and Storage  
Pet Waste  
Bulk Material Storage  
Garbage/Litter in Open Spaces  
Outdoor Loading/Offloading Area  
Building Washing  
Outdoor liquid storage  
Sidewalk Maintenance

## Management Practices already Implemented for Stormwater Quality

Recycling  
Litter Control  
Street sweeping  
Salt spreaders maintained and calibrated  
Fertilizers and Pesticides are not used

Pet Waste Program  
Outdoor Trash Containers Covered  
Vehicle/Equipment repairs done indoors  
Vehicle/Equipment washing done indoors

## Areas in Need of Future Management Practices

- Outside Diesel Fueling Stations practice to prevent excess fuel on ground
- Alternative material used instead of salt on roadways in winter
- Salt spread with considerations made to environmental impacts
- A schedule and inspection form needed for pond inspection and maintenance
- A record keeping mechanism to track activities in stormwater systems each year
- (i.e. # of catch basins cleaned, miles of road swept per year)
- Preventative Maintenance schedule implemented
- Spill prevention and response plan
- Culvert maintenance protocol to lessen the impact in receiving water bodies
- Outdoor storage of bulk materials procedure is needed
- Loading/Offloading procedure



## **Step 4: Develop BMP's & Measurable Goals**

- **Develop based on type of operation**
- **Unified approach across operations**
- **Implementation schedule**

# BMP Summary Sheet

**Department Name:**

**Category of Municipal Operations:**

**BMP Title:**

**BMP Description:**

**Measurable Goals:**

**Timeline/Implementation Schedule:**

**Specific Components and Notes:**

**Responsible Party for this BMP**

*Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.*

Name:

Department:

Phone:

E-mail:

# BMP Summary Sheet

**Department Name:**

**Category of Municipal Operations:**    **Vehicle and Fleet Maintenance**

**BMP Title:**            **Vehicle and Equipment Cleaning**

**BMP Description:**

- Mark the area clearly as a wash area, which should be covered or bermed to collect wash water and direct it to a treatment or disposal facility.
- Use biodegradable, phosphate-free detergents for washing vehicles as appropriate.
- Design wash areas to properly collect and dispose of wash water when engine cleaning is conducted and when chemical additives, solvents, or degreasers are used.
- Consider washing vehicles and equipment inside the building if washing must occur on-site.
- If washing must occur outside, use designated paved wash areas.
- If a paved area is not available for outdoor washing, it should be done over a gravel or grassed area with cold water and no soap.
- Cover the wash area when not in use to prevent contact with rain water.
- Consider filtering and recycling wash water.
- Discharge all wash water to a sanitary sewer, holding tank, or a process treatment system after consulting with the local sewer authority to find out if pretreatment is required.

**Measurable Goals:**

- Create and mark the wash area in your facility.
- Report number of facilities where proper disposal of wastewater has been implemented.
- Train fleet maintenance staff on policies, procedures, BMPs and stormwater management.

# Examples of Measurable Goals

- Number of catch basins cleaned
- Number of facilities implemented
- Staff retraining or continuing education
- Policies ,procedures or BMP updates or revisions
- Number of alternative products adopted for use
- Reduction in fertilizer usage
- Number of sites that have been modified to discourage dumping

### **Step 5: Implementation**

- **Establish Priorities**

*Is there an immediate threat to Water Quality ?*

- **Implement BMP's**

*Operational*

*Structural*

- **Staff Training Program**

- **Reporting**

*SWMPP Requirements*











**Town of Perinton  
Outdoor Wash Bay**

# Think about a Pet Waste Program



INTERNATIONAL



USDOT 1188611NY

DIESEL  
FUEL  
ONLY



GENCO  
SAFETY  
INSTRUCTIONS  
READ CAREFULLY



# Third Party Certification

- **Performing Contracted Services**
- **Implement any Portion of SWMP**
- **Street Sweeping**
- **Plowing**
- **Lawn Care**

**Must have certification statement,  
contract or agreement**

# Consider GI in Municipal Operations

- Look for Opportunities

# Training, Training, Training



# Shop Posters

**BE AN**  
**H<sub>2</sub>O HERO!**

Protect Storm Inlets!

THANKS, PAL!

**ONLY RAIN  
DOWN THE  
DRAIN!**

**iP21**

Magale Brooks  
Green University

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**BE AN**  
**H<sub>2</sub>O HERO!**

Report Illicit Discharges  
to Your Supervisor!

**ONLY RAIN  
DOWN THE  
DRAIN!**

**iP21**

Magale Brooks  
Green University

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# BE AN H<sub>2</sub>O HERO!

Wash Equipment in Designated Areas!



Maggie Brooks  
County Executive



Funding provided by the IP21 Priority Revenues through a grant from the U.S. Department of Environmental Protection.

For questions, contact the Environmental Compliance, Enforcement and Permitting Office at 9100 South State Street, Suite 100, Denver, CO 80231. Phone: 303.733.1234. Email: [ip21@denvergov.org](mailto:ip21@denvergov.org)

# BE AN H<sub>2</sub>O HERO!

Clean Up Spills Promptly!



Maggie Brooks  
County Executive



Funding provided by the IP21 Priority Revenues through a grant from the U.S. Department of Environmental Protection.

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**MS4 Annual Report Form**

This report is being submitted for the reporting period ending March 9,

If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

SPDES ID

**Minimum Control Measure 6. Stormwater Management for Municipal Operations**

The information in this section is being reported (check one):

- On behalf of an individual MS4  
 On behalf of a coalition

How many MS4s contributed to this report?

1. Choose/list each municipal operation/facility that contributes or may potentially contribute Pollutants of Concern to the MS4 system. For each operation/facility indicate whether the operation/facility has been addressed in the MS4's/Coalition's Stormwater Management Program (SWMP) Plan and whether a self-assessment has been performed during the reporting period. A self-assessment is performed to: 1) determine the sources of pollutants potentially generated by the permittee's operations and facilities; 2) evaluate the effectiveness of existing programs and 3) identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it's not done already.

<u>Operation/Activity/Facility</u>	<u>Addressed in SWMP?</u>		<u>Self-Assessment Operation/Activity/Facility performed within the past 3 years?</u>	
	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Street Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Bridge Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Winter Road Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Salt Storage.....	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Solid Waste Management.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
New Municipal Construction and Land Disturbance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Right of Way Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Marine Operations.....	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hydrologic Habitat Modification.....	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parks and Open Space.....	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Municipal Building.....	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Stormwater System Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Vehicle and Fleet Maintenance.....	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other.....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9, 

2	0	1	4
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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

TOWN OF BRIGHTON

SPDES ID

N	Y	R	2	0	A	1	6	4
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**7. Evaluating Progress Toward Measurable Goals MCM 6**

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMP), including requirements in Part III.C.1. Submit additional pages as needed.

**A. Briefly summarize the Measurable Goal identified in the SWMP in this reporting period.**

Televise storm & sanitary sewer to identify sources of I/I and structural deficiencies.  
 Flush storm sewer to improve hydraulic characteristics.  
 Repair mains and laterals to remove I/I and exfiltration of wastewater to surrounding soils.  
 Inspect and repair stormwater catch basins  
 Stencil Storm inlets "no dumping"

**B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.**

14,200 lf of sanitary sewer and 7,195 lf of storm sewer was televised.  
 129,613 lf of sanitary sewer and 19,786 lf of sanitary sewer was flushed and cleaned.  
 23 sanitary sewer repairs @ 630 lf  
 17 sanitary lateral repairs @ 397 lf  
 50 sanitary sewer manholes were reconstructed  
 25 storm sewer manholes were reconstructed

**C. How many times was this observation measured or evaluated in this reporting period?**

			1
--	--	--	---

(See: [asp/iss/part3/part3a/wvwrta](#))**D. Has your MS4 made progress toward this measurable goal during this reporting period?**

Yes  No

**E. Is your MS4 on schedule to meet the deadline set forth in the SWMP?**

Yes  No

**F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).**

Continue with the I/I investigation program for sanitary and storm sewers. Continue to asses and adapt the I/I program based on findings and reports.  
 Continue with annual sewer relining program and grouting programs.  
 Continue training program for department of public works personnel.

**Only Rain.....**

**.....Down the Drain**



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# BMP Summary Sheet

**Department Name:**

**Category of Municipal Operations: Stormwater System Maintenance**

**BMP Title:**

**Catch Basin/ Inlet Structures**

**BMP Description:**

- Staff should regularly inspect the storm drain system to identify problems.
- Any deterioration threatening structural integrity should be immediately repaired.
- Catch basins should be cleaned before the sump is 40% full. Cleaning frequently should be scheduled as needed to meet this standard.
- Clean catch basins, inlets and other conveyance structures in high pollution load areas before the wet season to remove accumulated sediment and debris.
- Conduct inspections more frequently during wet season for problem areas where sediment or trash accumulates more often.
- Keep accurate logs of the number of catch basins cleaned and record the amount of waste collected.
- Store any collected waste appropriately away from inlets or streams. If waste is collected by vector follow procedures for dumping of vector waste.

**Measurable Goals:**

- Approximate quantity (tons or cubic yards) of material cleaned from structures
- Frequency of scheduled cleaning